

Claims

- [c1] 1. A method of remotely servicing a scanner from a central service facility, comprising the steps of:
monitoring traffic on a local area network, said traffic comprising data that conforms to a communications protocol;
specifying a scanner connected to said local area network;
capturing from said local area network traffic data originated from said specified scanner, said captured data comprising at least one image frame;
sending said captured data to a central service facility; and
displaying said image frame at said central service facility,
wherein said monitoring, capturing and sending steps are performed by a computerized device connected to said local area network.
- [c2] 2. The method as recited in claim 1, further comprising the step of diagnosing an image quality problem of said specified scanner that is visible in said displayed image frame.
- [c3] 3. The method as recited in claim 1, wherein said captured data is sent from said computerized device to said central service facility via a virtual private network.
- [c4] 4. The method as recited in claim 1, wherein said scanner is specified in a communication sent from said central service facility to said computerized device.
- [c5] 5. The method as recited in claim 1, further comprising the step of downloading programming to said computerized device via a wide area network, said programming enabling said computerized device to perform said monitoring, capturing and sending steps.
- [c6] 6. The method as recited in claim 5, further comprising the steps of sending an authorization code from said computerized device to a server via said wide area network, and downloading said programming from said server to said computerized device only if said authorization code is valid.
- [c7] 7. The method as recited in claim 1, wherein said communications protocol is

DICOM and said data comprises DICOM image files.

[c8]

8. A method of remotely servicing a scanner from a central service facility, comprising the steps of:
sending a file containing a troubled image from a scanner to a computerized device via a local area network, said troubled image file conforming to a communications protocol;
sending said troubled image file from said computerized device to a central service facility via a route other than said local area network;
displaying said troubled image at said central service facility; and
diagnosing an image quality problem of said scanner that is visible in said displayed troubled image.

[c9]

9. A system comprising:
a local area network;
a scanner connected to said local area network and having a capability of sending, via said local area network, image files formatted in accordance with a communications protocol, each image file incorporating at least one image frame;
a first computerized device at a central service facility;
a second computerized device connected to said local area network and programmed with data capture software to capture an image file on said local area network that originated from said scanner in response to said scanner being specified as a target; and
a communications channel for connecting said first computerized device to said second computerized device,
wherein said scanner is specified as a target by transmission of an instruction from said first computerized device to said second computerized device via said communications channel.

[c10]

10. The system as recited in claim 9, wherein said data capture software comprises programming for sending said captured image file to said central service facility via said communications channel.

[c11]

11. The system as recited in claim 9, wherein said communications channel is

part of a virtual private network.

- [c12] 12. The system as recited in claim 9, wherein said communications protocol is DICOM.
- [c13] 13. The system as recited in claim 9, further comprising a server programmed to send said data capture software to said second computerized device via said communications channel.
- [c14] 14. The system as recited in claim 13, wherein said server is programmed to send said data capture software to said computerized device only in response to receipt of a valid authorization code from said computerized device.
- [c15] 15. A method of remotely servicing a scanner from a central service facility, comprising the steps of:
specifying a scanner connected to a local area network;
capturing a DICOM object from traffic on said local area network, said DICOM object comprising data reflecting origination from said specified scanner and data for at least one image frame acquired by said specified scanner;
sending said captured DICOM object to a central service facility; and
diagnosing a problem associated with said specified scanner using said captured DICOM object received at said central service facility,
wherein said capturing and sending steps are performed by a computerized device connected to said local area network.
- [c16] 16. The method as recited in claim 15, wherein said captured DICOM object is sent from said computerized device to said central service facility via a virtual private network.
- [c17] 17. The method as recited in claim 15, wherein said scanner is specified in a communication sent from said central service facility to said computerized device.
- [c18] 18. A system comprising a network, a communications channel, a data capture device connected to said network and to said communications channel, and a scanner programmed to construct image files in accordance with a

communications protocol, said scanner being connected to said network, wherein said data capture device comprises a computer programmed to perform the following steps:

capturing, from traffic on said network, image files originating from said scanner in response to receipt via said communications channel of a communication specifying said source; and
sending said captured image file to a destination via said communications channel.

[c19] 19. The system as recited in claim 18, wherein said network is a local area network and said communications channels forms part of a virtual private network.

[c20] 20. The system as recited in claim 18, wherein said communications protocol is DICOM.

[c21] 21. A method for remotely monitoring image quality on a scanner connected to a local area network, comprising the following steps:
sending an instruction from a first computerized device not connected to the local area network to a second computerized device connected to the local area network, said instruction including an identifier for a scanner to be monitored;
in response to receipt of said instruction, capturing in the second computerized device an image file on the local area network that originated from said scanner, said image file being formatted in accordance with a communications protocol;
sending said captured image file from the second computerized device to the first computerized device via a communications channel other than the local area network; and
displaying an image frame from the captured image file at the first computerized device.

[c22] 22. The method as recited in claim 21, further comprising the step of diagnosing an image quality problem of the scanner that is apparent from the displayed image frame.

[c23] 23. The method as recited in claim 21, wherein said communications protocol is

DICOM.

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